

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Complete Listing of Claims:

1. (Previously presented) A fire extinguisher comprising:
 - a bottle having an interior and at least an outlet;
 - a fire suppressant contained by the bottle when the extinguisher is in a pre-discharge condition; and
 - a gas generant and discharge assembly extending through the bottle outlet and secured there to and comprising:
 - a source of gas for pressurizing the suppressant at least when the bottle is in a discharging condition comprising:
 - an ignition cord having a sheath and a pyrotechnic charge contained within the sheath and extending from a proximal end to a distal end;
 - a flexible tube surrounding the sheath at least along a major portion of a length thereof and extending from a proximal end to a distal end;
 - a gas generant charge contained between the tube and sheath; and
 - means for igniting the ignition cord; and
 - an outlet, through which the suppressant is discharged when the extinguisher is in the discharging condition.
2. (Previously presented) The fire extinguisher of claim 1 wherein:
 - the means for igniting comprises a percussion primer having a primer charge and an operative end in close facing relationship to the proximal end of the ignition cord effective to ignite the ignition cord;
 - the gas generator and discharge assembly comprises:
 - a first handle portion positioned to be gripped by the fingers of a user's hand and
 - a second handle portion positioned to be simultaneously engaged by a palm of said hand

and mounted to be shifted toward the first handle portion responsive to a compressive force applied by the hand;

firing pin mechanism mounted for spring-biased movement between an initial position and second position in which an operative end portion of the firing pin mechanism contacts the percussion primer with effective momentum to trigger the primer.

3. (Previously presented) The fire extinguisher of claim 2 wherein:
the firing pin mechanism comprises:

a spring loaded firing pin initially held in its initial position by a sacrificial element against the spring-bias force; and

a lance shiftable between its initial position and its second position by said movement of the second handle portion, the shift of the lance rupturing the sacrificial element to release the firing pin.

4. (Previously presented) The fire extinguisher of claim 3 further comprising a seal, initially between the lance and the firing pin and initially sealing the bottle interior from an external environment and mounted so as to be ruptured by the shift of the lance.

5. (Previously presented) The fire extinguisher of claim 4 wherein the gas generator and discharge assembly further comprises a rigid metallic firing pin housing having :

a distal end portion containing proximal end portions of the ignition cord and flexible tube;

an intermediate portion holding the primer in press fit relation; and

a proximal portion at least partially containing the firing pin; and

wherein a discharge path for the suppressant extends through at least one lateral aperture in the firing pin housing and, therefrom, through a proximal end of the firing pin housing.

6. (Previously presented) The fire extinguisher of claim 5 wherein in the pre-discharge condition the pressure within the bottle is lower than 70 psi and the ignition cord pyrotechnic

charge and the gas generant charge are, in combination, effective to at least temporarily elevate the pressure within the bottle to between 300 and 450 psi.

7. (Previously presented) The fire extinguisher claim 1 wherein the suppressant consists in major mass part of heptafluoropropane, and has a total mass of less than 7 pounds.

8. (Previously presented) The fire extinguisher of claim 7 wherein the total mass is 2–3 pounds.

9. (Previously presented) The fire extinguisher of claim 7 wherein a minimum bottle diameter between the interior and the outlet is no more than 0.5 inch.

10. (Previously presented) The fire extinguisher of claim 9 wherein the ignition cord has a length of between 1 and 3 feet.

11. (Previously presented) The fire extinguisher claim 1 wherein the ignition cord has a length of at least one foot.

12. (Previously presented) The fire extinguisher of claim 1 wherein the suppressant comprises 2-3 pounds of dodecafluoro-2-methylpentan-3-one.

13. (Previously presented) The device of claim 1 wherein the suppressant consists essentially of at least one fluorocarbon.

Claims 14-17 (Canceled)

18. (New) A fire extinguisher comprising:
a bottle having an interior and at least an outlet;

a fire suppressant contained by the bottle when the extinguisher is in a pre-discharge condition; and

a gas generant and discharge assembly extending through the bottle outlet and secured there to and comprising:

a source of gas for pressurizing the suppressant at least when the bottle is in a discharging condition comprising:

an ignition cord having a sheath and a pyrotechnic charge contained within the sheath and extending from a proximal end to a distal end;

a flexible tube surrounding the sheath at least along a major portion of a length thereof and extending from a proximal end to a distal end;

a gas generant charge contained between the tube and sheath;

a percussion primer having a primer charge and an operative end in close facing relationship to the proximal end of the ignition cord effective to ignite the ignition cord;

a first handle portion positioned to be gripped by the fingers of a user's hand and a second handle portion positioned to be simultaneously engaged by a palm of said hand and mounted to be shifted toward the first handle portion responsive to a compressive force applied by the hand;

firing pin mechanism mounted for spring-biased movement between an initial position and second position in which an operative end portion of the firing pin mechanism contacts the percussion primer with effective momentum to trigger the primer; and

an outlet, through which the suppressant is discharged when the extinguisher is in the discharging condition.

19. (New) The fire extinguisher of claim 18 wherein:
the firing pin mechanism comprises:

a spring loaded firing pin initially held in its initial position by a sacrificial element against the spring-bias force; and

a lance shiftable between its initial position and its second position by said movement of the second handle portion, the shift of the lance rupturing the sacrificial element to release the firing pin.

20. (New) The fire extinguisher of claim 19 further comprising a seal, initially between the lance and the firing pin and initially sealing the bottle interior from an external environment and mounted so as to be ruptured by the shift of the lance.

21. (New) The fire extinguisher of claim 20 wherein the gas generator and discharge assembly further comprises a rigid metallic firing pin housing having :
a distal end portion containing proximal end portions of the ignition cord and flexible tube;
an intermediate portion holding the primer in press fit relation; and
a proximal portion at least partially containing the firing pin; and
wherein a discharge path for the suppressant extends through at least one lateral aperture in the firing pin housing and, therefrom, through a proximal end of the firing pin housing.

22. (New) The fire extinguisher of claim 21 wherein in the pre-discharge condition the pressure within the bottle is lower than 70 psi and the ignition cord pyrotechnic charge and the gas generant charge are, in combination, effective to at least temporarily elevate the pressure within the bottle to between 300 and 450 psi.

23. (New) A fire extinguisher comprising:
a bottle having an interior and at least an outlet;
a fire suppressant contained by the bottle when the extinguisher is in a pre-discharge condition, wherein the suppressant comprises 2-3 pounds of dodecafluoro-2-methylpentan-3-one; and
a gas generant and discharge assembly extending through the bottle outlet and secured there to and comprising:

a source of gas for pressurizing the suppressant at least when the bottle is in a discharging condition comprising:

an ignition cord having a sheath and a pyrotechnic charge contained within the sheath and extending from a proximal end to a distal end;

a flexible tube surrounding the sheath at least along a major portion of a length thereof and extending from a proximal end to a distal end;

a gas generant charge contained between the tube and sheath; and
means for igniting the ignition cord; and

an outlet, through which the suppressant is discharged when the extinguisher is in the discharging condition.